

In the Claims

Applicant has submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Please cancel claims 1-34 without prejudice or disclaimer.

Please enter new claims 35-95 as noted below.

1-34. (Cancelled)

35. (New) A surgical device for passing a flexible elongated element through tissue of a subject, the device comprising:

an elongate shaft with a proximal end, a distal end, and a passageway adapted to deliver the elongated element toward the distal end; and

an advancement mechanism adapted to move the flexible elongated element in the passageway, the advancement mechanism having a first surface to engage a first lateral portion of the flexible elongated element such that movement of the first surface moves the flexible elongated element in the passageway with force sufficient to penetrate the tissue.

36. (New) The surgical device of claim 35, wherein the surgical device is suitable for use in a closed surgical operation.

37. (New) The surgical device of claim 36, further comprising:

a second surface opposed to the first surface, the second surface adapted to engage a second lateral portion of the flexible elongated element such that movement of at least one of the first and second surfaces moves the flexible elongated element toward the distal end with force sufficient to penetrate the tissue.

38. (New) The surgical device of claim 37, wherein the first surface comprises a peripheral surface of a first wheel.

39. (New) The surgical device of claim 38, wherein the second surface comprises a peripheral surface of a second wheel.
40. (New) The surgical device of claim 39, wherein the peripheral surface of the first wheel has a peripheral groove adapted to engage the first lateral portion of the flexible elongated element.
41. (New) The surgical device of claim 40, wherein the peripheral surface of the second wheel has a peripheral groove adapted to engage the second lateral portion of the flexible elongated element.
42. (New) The surgical device of claim 39, wherein the first wheel is a power driven wheel and the second wheel is a follower wheel.
43. (New) The surgical device of claim 39, wherein each of the first and the second wheels is a power driven wheel.
44. (New) The surgical device of claim 37, wherein the first surface has a first groove oriented to receive the first lateral portion of the flexible elongated element.
45. (New) The surgical device of claim 44, wherein the second surface has a second groove oriented to receive the second lateral portion of the flexible elongated element.
46. (New) The surgical device of claim 35, wherein the first surface has a first groove oriented to receive the first lateral portion of the flexible elongated element.
47. (New) The surgical device of claim 46, wherein the first surface has a second groove of a size different than the first groove.
48. (New) The surgical device of claim 35, wherein the advancement mechanism is located

adjacent the proximal end of the elongate shaft.

49. (New) The surgical device of claim 35, wherein the advancement mechanism is located adjacent the distal end of the elongate shaft.

50. (New) The surgical device of claim 35, further comprising:
a guide tube disposed within the elongate shaft, the guide tube forming at least a portion of the passageway and constructed and arranged to closely support the flexible elongated element as it moves toward the distal end.

51. (New) The surgical device of claim 35, further comprising:
a compartment to store a length of the flexible elongated element provided to the advancement mechanism.

52. (New) The surgical device of claim 51, wherein the compartment is adapted to store the length in a coil.

53. (New) The surgical device of claim 35, further comprising:
a cutter adapted to cut the flexible elongated element near the distal end of the elongate shaft.

54. (New) The surgical device of claim 35, further comprising:
a pair of operable jaws disposed at the distal end of the elongate shaft.

55. (New) The surgical device of claim 35, wherein the passageway includes a curved portion adapted to impart curvature to the flexible elongated element as it passes through the passageway.

56. (New) The surgical device of claim 35, wherein the flexible elongated element is used to form suture secured to tissue.

57. (New - Withdrawn) The surgical device of claim 35, wherein the first surface comprises a first belt surface of a first belt.
58. (New - Withdrawn) The surgical device of claim 57, wherein the first surface comprises an adhesive to engage the first lateral portion of the flexible elongated element.
59. (New - Withdrawn) The surgical device of claim 58, further comprising:
a separator adapted to separate the flexible elongated element from the first surface.
60. (New - Withdrawn) The surgical device of claim 57, further comprising:
a second belt surface of a second belt, the second belt surface opposed to the first belt surface and oriented along a second lateral portion of the flexible elongated element and adapted to engage the second lateral portion such that movement of the first and second belt surfaces moves the flexible elongated element in the passageway with force sufficient to penetrate the tissue.
61. (New - Withdrawn) The surgical device of claim 60, wherein at least one of the first or second belt surfaces includes a groove adapted to engage either the first or second lateral portions of the flexible elongated element.
62. (New - Withdrawn) The surgical device of claim 57, wherein the first belt comprises a tube with a lengthwise endless slit.
63. (New - Withdrawn) The surgical device of claim 62, further comprising:
a separator adapted to separate the flexible elongated element the tube through the slit.
64. (New - Withdrawn) The surgical device of claim 35, wherein the first surface comprises a strap adapted to wrap around the flexible elongated element such that movement of the strap rotates the flexible elongated element as the flexible elongated element moves toward the distal

end.

65. (New - Withdrawn) The surgical device of claim 35, wherein the advancement mechanism comprises a sleeve and a substantially cylindrical rod with an outer surface having a spiral groove, the rod adapted rotate within the sleeve to move the flexible elongated element in the passageway.

66. (New) A surgical device for passing a flexible elongated element through tissue of a subject, the device comprising:

an elongate shaft with a proximal end, a distal end, and a passageway adapted to deliver the elongated element toward the distal end;

an advancement mechanism adapted to move the flexible elongated element in the passageway, the advancement mechanism having a first surface adapted to engage a first lateral portion of the flexible elongated element such that movement of the first surface moves the flexible elongated element in the passageway; and

a cutter adapted to cut the flexible elongated element.

67. (New) The surgical device of claim 66, wherein the surgical device is suitable for use in a closed surgical operation.

68. (New) The surgical device of claim 67, further comprising:

a second surface opposed to the first surface, the second surface adapted to engage a second lateral portion of the flexible elongated element such that movement of at least one of the first and second surfaces moves the flexible elongated element toward the distal end.

69. (New) The surgical device of claim 68, wherein the first surface comprises a peripheral surface of a first wheel.

70. (New) The surgical device of claim 69, wherein the second surface comprises a peripheral surface of a second wheel.

71. (New) The surgical device of claim 70, wherein the peripheral surface of the first wheel has a peripheral groove adapted to engage the first lateral portion of the flexible elongated element.
72. (New) The surgical device of claim 71, wherein the peripheral surface of the second wheel has a peripheral groove adapted to engage the second lateral portion of the flexible elongated element.
73. (New) The surgical device of claim 70, wherein the first wheel is a power driven wheel and the second wheel is a follower wheel.
74. (New) The surgical device of claim 70, wherein each of the first and the second wheels is a power driven wheel.
75. (New) The surgical device of claim 68, wherein the first surface has a first groove oriented to receive the first lateral portion of the flexible elongated element.
76. (New) The surgical device of claim 75, wherein the second surface has a second groove oriented to receive the second lateral portion of the flexible elongated element.
77. (New) The surgical device of claim 66, wherein the first surface has a first groove oriented to receive the first lateral position of the flexible elongated element.
78. (New) The surgical device of claim 77, wherein the first surface has a second groove of a size different than the first groove.
79. (New) The surgical device of claim 66, wherein the flexible elongated element is used to form suture secured to tissue.

80. (New) The surgical device of claim 66, wherein the advancement mechanism is located adjacent the proximal end of the elongate shaft.

81. (New) The surgical device of claim 66, wherein the advancement mechanism is located adjacent the distal end of the elongate shaft.

82. (New) The surgical device of claim 66, further comprising:
a guide tube disposed within the elongate shaft, the guide tube forming at least a portion of the passageway and constructed and arranged to closely support the flexible elongated element as it moves toward the distal end.

83. (New) The surgical device of claim 66, further comprising:
a compartment to store a length of the flexible elongated element provided to the advancement mechanism.

84. (New) The surgical device of claim 83, wherein the compartment is adapted to store the length in a coil.

85. (New) The surgical device of claim 66, further comprising:
a pair of operable jaws disposed at the distal end of the elongate shaft.

86. (New) The surgical device of claim 66, wherein the passageway includes a curved portion adapted to impart curvature to the flexible elongated element as it passes through the passageway.

87. (New - Withdrawn) The surgical device of claim 66, wherein the first surface comprises a first belt surface of a first belt.

88. (New - Withdrawn) The surgical device of claim 87, further comprising:
a second belt surface of a second belt, the second belt surface opposed to the first belt

surface and oriented along a second lateral portion of the flexible elongated element and adapted to engage the second lateral portion such that movement of the first and second belt surfaces moves the flexible elongated element in the passageway with force sufficient to penetrate the tissue.

89. (New - Withdrawn) The surgical device of claim 88, wherein at least one of the first or second belt surfaces includes a groove adapted to engage either the first or second lateral portions of the flexible elongated element.

90. (New - Withdrawn) The surgical device of claim 87, wherein the first surface comprises an adhesive to engage the first lateral portion of the flexible elongated element.

91. (New - Withdrawn) The surgical device of claim 90, further comprising:
a separator adapted to separate the flexible elongated element from the first surface.

92. (New - Withdrawn) The surgical device of claim 87, wherein the first belt comprises a tube with a lengthwise endless slit.

93. (New - Withdrawn) The surgical device of claim 92, further comprising:
a separator adapted to separate the flexible elongated element the tube through the slit.

94. (New - Withdrawn) The surgical device of claim 66, wherein the first surface comprises a strap adapted to wrap around the flexible elongated element such that movement of the strap rotates the flexible elongated element the flexible elongated element moves toward the distal end.

95. (New - Withdrawn) The surgical device of claim 66, wherein the advancement mechanism comprises a sleeve and a substantially cylindrical rod with an outer surface having a spiral groove, the rod adapted rotate within the sleeve to move the flexible elongated element in the passageway.